

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Concurrently Amended) A superconducting cable comprising a superconducting layer, wherein the superconducting layer has a portion whose critical current value is differentiated from the critical current value of ~~the other~~ another , normal portion;

wherein:

the potion of the superconducting layer is a current limiting portion having a critical current value smaller than that of the normal portion; and

the current limiting portion and the normal portion are constituted by a superconducting tape, and the current limiting portion having a smaller number of clad wires than that used for the normal portion so that the amount of superconductor of the current limiting portion is reduced as compared to the normal portion.

2. (Concurrently Amended) A superconducting cable according to claim 1, ~~wherein the superconducting layer has a current limiting portion whose critical current value is smaller than that of the other portion~~ wherein the superconducting tape used for the current limiting portion and the normal portion are connected by soldering.

3. (Original) A superconducting cable according to claim 1, wherein the superconducting layer is at least one of a superconducting conductor layer and a shielding layer provided at the outer periphery of the superconducting conductor layer.

4. (Original) A superconducting cable according to claim 2, wherein the superconducting layer is at least one of a superconducting conductor layer and a shielding layer provided at the outer periphery of the superconducting conductor layer.

5. (Concurrently Amended) A superconducting cable line comprising:

a superconducting cable set forth in claim 1 having a plurality of cable cores each including a superconducting layer having a critical current limiting portion and a normal portion; and

a splitter which houses separated portions of the plurality of cable cores such that the separated cable cores are sufficiently distanced from each other,

wherein the critical current limiting portion of each of the plurality of cable cores ~~portions whose critical current values are differentiated from those of the normal portion (i.e., the other portion of the cable cores)~~ are housed in the splitter.

6. (Concurrently Amended) A superconducting cable line comprising:

a superconducting cable set forth in claim 2 having a plurality of cable cores each including a superconducting layer having a critical current limiting portion and a normal portion; and

a splitter which houses separated portions of the plurality of cable cores such that the separated cable cores are sufficiently distanced from each other,

wherein the critical current limiting portion of each of the plurality of cable cores ~~portions whose critical current values are differentiated from those of the normal portion (i.e., the other portion of the cable cores)~~ are housed in the splitter.

7. (Concurrently Amended) A superconducting cable line comprising:

a superconducting cable set forth in claim 3 having a plurality of cable cores each including a superconducting layer having a critical current limiting portion and a normal portion; and

a splitter which houses separated portions of the plurality of cable cores such that the separated cable cores are sufficiently distanced from each other,

wherein the critical current limiting portion of each of the plurality of cable cores ~~portions whose critical current values are differentiated from those of the normal portion (i.e., the other portion of the cable cores)~~ are housed in the splitter.

8. (Concurrently Amended) A superconducting cable line comprising:
a superconducting cable set forth in claim 4 having a plurality of cable cores each including a superconducting layer having a critical current limiting portion and a normal portion; and
a splitter which houses separated portions of the plurality of cable cores such that the separated cable cores are sufficiently distanced from each other,
wherein the critical current limiting portion of each of the plurality of cable ~~portions whose critical current values are differentiated from those of the normal portion (i.e., the other portion of the cable cores)~~ are housed in the splitter.
9. (Original) A superconducting cable line according to claim 5, wherein a coolant for cooling the superconducting cable fills the splitter, and a regulating valve for regulating the pressure when the coolant vaporizes is provided for the splitter.
10. (Original) A superconducting cable line according to claim 6, wherein a coolant for cooling the superconducting cable fills the splitter, and a regulating valve for regulating the pressure when the coolant vaporizes is provided for the splitter.
11. (Original) A superconducting cable line according to claim 7, wherein a coolant for cooling the superconducting cable fills the splitter, and a regulating valve for regulating the pressure when the coolant vaporizes is provided for the splitter.
12. (Original) A superconducting cable line according to claim 8, wherein a coolant for cooling the superconducting cable fills the splitter, and a regulating valve for regulating the pressure when the coolant vaporizes is provided for the splitter.
13. (Original) A superconducting cable line according to claim 5, wherein portions having a smaller critical current value are disposed in the splitter at positions distanced from the assembled portions of the cable cores: namely, at the end side of the split cable cores in the case of the splitter being a termination joint box, and at a central position in the case of the splitter being an intermediate joint box.

14. (Concurrently Amended) A superconducting cable line according to claim 9, wherein the critical current limiting portions having a smaller critical current value are disposed in the splitter at positions distanced from the assembled portions of the cable cores: namely, at the end side of the split cable cores in the case of the splitter being a termination joint box, and a central position in the case of the splitter being an intermediate joint box.

15. (Previously Presented) A superconducting cable line according to claim 5, wherein holding fixtures for holding the cable cores in the splitter are movable in the splitter in accordance with the expansion and contraction of the cable cores and hold the cable cores in a state in which the cable cores are separated from each other.

16. (Previously Presented) A superconducting cable line according to claim 9, wherein holding fixtures for holding the cable cores in the splitter are movable in the splitter in accordance with the expansion and contraction of the cable cores and hold the cable cores in a state in which the cable cores are separated from each other.

17. (Previously Presented) A superconducting cable line according to claim 13, wherein holding fixtures for holding the cable cores in the splitter are movable in the splitter in accordance with the expansion and contraction of the cable cores and hold the cable cores in a state in which the cable cores are separated from each other.

18. (New) A method of manufacturing a superconducting cable comprising:

employing a superconducting tape for a first portion of the cable and a second portion of the cable, said first portion of the cable being a current limiting portion and said second portion being a normal portion;

setting the amount of superconductor of the superconducting tape used for said current limiting portion to be smaller than that used for said normal portion.

19. (New) A method of manufacturing a superconducting cable comprising:

employing a superconducting tape for a first portion of the cable and a second portion of the cable, said first portion of the cable being a current limiting portion and said second portion being a normal portion;

setting the amount of superconducting tape used for said current limiting portion to be smaller than that used for said normal portion.